

RATIONALISED SYLLABI

Class-12th

With effect from

2023-24

For

UTs of J&K and Ladakh



The Jammu and Kashmir Board of School Education

Rehari Colony, Jammu / Bemina, Srinagar

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GENERAL ENGLISH

CLASS–XII

TIME:3 HOURS

MAX MARKS: 100

80 (THEORY) +20 (INTERNAL ASSESSMENT)

PRESCRIBED BOOKS

1. *Flamingo*: Textbook in English for Class XII (Core Course) published by NCERT, New Delhi

1. The Last Lesson
2. Lost Spring
3. Deep Water
4. The Rat trap
5. Indigo
6. Poets and Pancakes
7. The Interview (Part I & II)
8. Going Places
9. My Mother at Sixty-six
10. Keeping Quiet
11. A Thing of Beauty
12. A Roadside Stand
13. Aunt Jennifer's Tigers

2. *Vistas*: Supplementary Reader in English for Class XII (Core Course) published by NCERT, New Delhi

1. The Third Level
2. The Tiger King
3. Journey to The End of the Earth
4. The Enemy
5. On the Face of It
6. Memories of Childhood (The Cutting of My Long Hair & We Too Are Human Beings)

SCHEME OF ASSESSMENT

Q No	DESCRIPTION	Weightage
SECTION A: READING COMPREHENSION		20 marks
1	One unseen passage (400-500 words) for note-making (5 marks), summarizing (4 marks) and providing the summary a title (1 mark).	10 marks
2	One unseen prose passage (400-500 words) followed by ten objective type questions including MCQ's, fill-ups, true/false, yes/no to assess comprehension, interpretation, inference and vocabulary.	1x10=10 Marks
SECTION B: WRITING SKILLS AND GRAMMAR		30 marks
3	One out of two questions on advertisements/ writing formal/informal invitations and replies (40-50 words).	4 marks
4	One out of two questions on letter writing (business or official letters for making enquiries, registering complaints, asking for and giving information, placing orders and sending replies, letters to the editor giving suggestions/opinions on an issue; letter to the school or college authorities, regarding admissions, school issues, requirements/suitability of courses, etc.) (120-150 words) Address: 1 mark Salutation: 1 mark Body: 3 marks Closing: 1 mark	6 marks
5	One question on writing a resume along with cover letter. Resume: 4 marks Cover letter (120-150) words: 2 marks	6 marks
6	One out of two compositions on article/ debate/ speech/ personality profile/ personal narrative/humorous writing (200-250 words).	6 marks
7	One passage 100-150 words in length for editing to test the following items: reflexive pronouns, tenses, punctuation, narration, conjunctions, prepositions and change of voice (8 items).	8 marks
SECTION C: Literature		30 marks
8	a) One poetic passage from the prescribed textbooks followed by four objective type questions on context, comprehension, poetic devices, theme, etc. (4×1=4marks) b) Two out of three short answer type questions on prescribed poems other than included at a) above based on poetic	10 marks

	devices, theme, global comprehension to be answered in 40-50 words. (2x3=6 marks)	
9	Three out of five short answer type questions from <i>Flamingo</i> based on prose lessons to assess inference and critical thinking (40-50 words each).	3 x 3 =9 Marks
10	One out of two long answer type questions from <i>Vistas</i> based on prose lessons to assess inference, critical thinking and appreciation, global comprehension, theme, style and extrapolation beyond the texts. Questions to elicit creative responses and ability to form opinions. (150-200 words)	6 marks
11	One out of two long answer type questions from the play based on inference, theme, characterization, setting, plot, literary devices and critical thinking. (120-150 words)	5 marks

INTERNAL ASSESSMENT

Assessment of Listening and Speaking Skills

Assessment of Listening and Speaking Skills will be for 20 marks. Practice and assessment is to be based on the activities included in the prescribed textbooks and by taking recourse to various resources and techniques available in the school.

INTERNAL ASSESSMENT

Assessment of Listening Skills - 05 marks.

Assessment of Speaking Skills – 05 Marks

Project Work - 10 Marks

Suggested Reading

For grammar, teachers and students can refer to any standard grammar textbook for further reading and clarification of concepts. Some of the books include:

- *English Grammar in Use by Raymond Murphy published (Cambridge University Press)*
- *Oxford Practice Grammar by John Eastwood published (Oxford University Press)*
- *Grammar Practice Activities by Penny Ur (Cambridge University Press)*
- *A Practical English Grammar by Thomson and Martinet (Oxford University Press)*
- *High School English Grammar by Wren and Martin (S Chand Publishing)*

Question Paper Design

General English XII

Marks: 80+20=100

Section	Competencies	Total marks
Comprehension	Conceptual understanding, decoding, Analyzing, inferring, interpreting, appreciation, literary, conventions and vocabulary, summarizing and using appropriate format/s	20 Marks
Writing Skills	Reasoning, appropriacy of style and tone, using appropriate format and fluency, inference, analysis, evaluation and creativity	30 Marks
Literature Textbook and Supplementary Reader	Recalling, reasoning, appreciating literary convention, inference, analysis, creativity with fluency	30 Marks
	TOTAL	80 Marks
Assessment of Listening and Speaking Skills		20 Marks
	GRAND TOTAL	100 Marks

HISTORY

Maximum marks: 100

Time: 3 hrs

Theory: 80 Marks

Project Work: 20 Marks

Themes In Indian History (Part-I)

25 Marks

1. The Story of the First Cities: Harappan Archaeology Broad overview: Early urban centers
Story of discovery: Harappan Civilization Excerpt: Archaeological report on a major site
Discussion: How it has been utilized by Archaeologist/Historians.
2. Political and Economic History: How inscriptions tell a story
Broad overview: Political and economic history from the Mauryan to the Gupta period. Story of discovery: Inscriptions and the decipherment of the script. Shifts in the understanding of political and economic history.
Excerpt: Asokan inscription and Gupta period land grant. Discussion: Interpretation of inscription by Historians.
3. Social Histories: Using the Mahabharata
Broad overview: Issues in social history, including caste, class, kinship and gender. Story of discovery: Transmission and publications of the Mahabharata.
Excerpt: From the Mahabharata, illustrating how it has been used by historians. Discussion: Other sources for reconstructing social history.
4. A History of Buddhism: Sanchi Stupa Broad overview:
 - (a) A brief review of religious histories of Vedic religion, Jainism, Vaisnavism, Saivism.
 - (b) Focus on BuddhismStory of discovery: Sanchi Stupa
Excerpt: Reproduction of sculptures from Sanchi
Discussion: Ways in which sculpture has been interpreted by historians, other sources for reconstructing the history of Buddhism

Themes In Indian History (Part II)

25 Marks

1. Agrarian Relations: The Ain-I-Akbari Broad overview:
 - (a) Structure of agrarian in the 16th and 17th centuries
 - (b) Patterns of change over the period.Story of Discovery: Account of the compilation and translation of Ain-i-

Akbari Excerpt: From the Ain-i-Akbari

Discussion: Ways in which historians have used the text to reconstruct history.

2. New Architecture: Hampi Broad overview:

(a) Outline of new buildings during Vijaynagar period-temples, forts, irrigation facilities.

(b) Relationship between architecture and the political system.

Story of Discovery: Account of how Hampi was found. Excerpts: Visuals of buildings at Hampi.

Discussion: Ways in which historians have analyzed and interpreted these structures.

3. Religious Histories: The Bhakti-Sufi Tradition. Broad overview:

(a) Outline of religious developments during this period.

(b) Ideas and practices of the Bhakti-Sufi saints.

Story of Transmission: How Bhakti-Sufi compositions have been preserved. Excerpts: Extracts from selected Bhakti - Sufi works.

Discussion: Ways in which these have been interpreted by historians.

4. Medieval Society through Travellers Account.

Broad overview: Outline of social and cultural life as they appear in travellers accounts. Story of their writings: A discussion of where they travelled, why they travelled, what they wrote, and for whom they wrote.

Excerpts: From Alberuni, Ibn Batuta, Bernie.

Discussion: What these travel accounts can tell us and how they have been interpreted by historians.

Themes in Indian History (Part-III)

25 Marks

1. Colonialism and Rural Society: Evidence from Official Reports. Broad overview:

(a) Life of zamindars, peasants and artisans in the late 18th century.

(b) East India Company, revenue settlements and surveys.

(c) Change over the nineteenth century.

Story of official records: An account of why official investigations into rural societies were undertaken and the types of records and reports produced.

Excerpts: From Firminger's Fifth Report. Accounts of Francis Buchanan-Hamilton and Deccan Riots Report.

Discussion: What the official records tell and do not tell, and how

they have been used by historians.

2. Representations of 1857. Broad overview:
 - (a) The events of 1857–58
 - (b) How these events were recorded and narrated. Focus: LucknowExcerpts: Pictures of 1857. Extracts from contemporary accounts.
Discussion: How the pictures of 1857 shaped British opinion of what had happened.

3. Mahatma Gandhi through Contemporary Eyes. Broad overview:
 - (a) The Nationalist Movement 1918–48
 - (b) The nature of Gandhian politics and leadership. Focus: Mahatma Gandhi in 1931Excerpts: Report from English and Indian language newspapers and other contemporary writings.
Discussion: How newspapers can be source of history.

5. The Making of the Constitution. Broad overview:
 - (a) Independence and the new nation state.
 - (b) The making of the Constitution.Focus: The Constitutional Assembly Debates
Excerpts: From the debates
Discussion: What such debates reveal and how they can be analyzed.

Map work on Unit 1-15:

5 marks

5 marks have been allotted for map work for which questions would be asked from chapter 1 to 15 of three books namely (Part -I, Part- II & Part-III)

Weightage to content:

Themes in Indian History (Part-I)	25 marks
Themes in Indian History (Part-II)	25 marks
Themes in Indian History (Part- III)	25 marks
Map Work	5 marks
Project Work	20 marks
Total	100 marks

Scheme of Assessment (Theory)

Question paper contains six sections namely

1. **Section –A** contains 10 (Objective Type Questions/MCOs) of 1 mark each.

1x10= 10 marks

2. **Section- B** contains 6 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 6 = 12$ marks
3. **Section – C** contains 6 Short Answer type questions of 4 marks each to be answered in 100 to 150 words. $4 \times 6 = 24$ marks
4. **Section - D** contains 3 Long Answer type questions of 8 marks each to be answered in 150 to 200 words. $8 \times 3 = 24$ marks
5. **Section – E** contains 1 Passage, having one question of 1 mark and two questions of 2 mark each to be answered in 20 to 30 = 5 marks
6. **Section – F** contains Map work of 5 marks.

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

Project Work: (Internal)

20 marks

For the purpose of project work, the following topics are suggested:

- (i) Sources of History of J&K.
- (ii) Food and clothing in J&K.
- (iii) Foundation of modern J&K with special reference to the Treaties of Lahore and Amritsar (1846).
- (iv) The cultural development in J&K State under Maharaja Ranbir Singh with special reference to Development of Education and Literature.
- (v) Development of means of Communications in J&K.

Scheme of Evaluation for Project work as per following:

The marks will be allocated under the following heads:

- | | |
|--|----------|
| 1. Project Synopsis | 02 marks |
| 2. Data/Statistical Analysis/Map Work | 03 Marks |
| 3. Visual/Overall Presentation | 05 Marks |
| 4. Analysis/Explanation and Interpretation | 05 Marks |
| 5. Bibliography | 01 Mark |
| 6. Viva-Voce | 04 Marks |

BOOKS PRESCRIBED:

1. *Themes in Indian History, Part-I, Class XII, Published by NCERT*
2. *Themes in Indian History, Part-II, Class XII, Published by NCERT*
3. *Themes in Indian History, Part-III, Class XII, Published by NCERT.*

ECONOMICS

Maximum Marks: 100

Time: 3 Hours

Theory: 80 Marks

Project: 20 Marks

Units		Marks
Part A	Introductory Microeconomics	
	Introduction	04
	Consumer's Equilibrium and Demand	14
	Producer Behaviour and Supply	14
	Forms of Market and Price Determination under Perfect competition with simple applications	08
		40
Part B	Introductory Macroeconomics	
	National Income and Related Aggregates	10
	Money and Banking	06
	Aggregate Demand & Aggregate Supply	12
	Government Budget and the Economy	06
	Balance of Payments & International Institutions	06
	Theory Paper(40+40=80Marks)	40
Part C	Project Work	20

Part A: Introductory Microeconomics

Unit 01: Introduction

- Meaning of micro-economics and macro-economic; positive and normative economics.
- What is an economy? Central problems of an economy: what, how and for whom to produce; concepts of Production Possibility Frontier and Opportunity Cost.

Unit 02: Consumer Equilibrium and Demand.

- Consumer's Equilibrium: Meaning and attainment of equilibrium through Utility Approach. One and two commodity cases.
- Demand: market demand, determinants of demand, demand schedule, demand curve, movement along and shifts in demand curve, price elasticity of demand, measurement of price elasticity of demand – percentage, total expenditure and geometric methods.

Unit 03: Producer Behaviour & Supply Meaning of Production Function–Short-Run and Long-Run

- Total product, Average Product and Marginal Product



- Returns to a factor.
- Cost – Short run costs - Total Cost, Total Fixed Cost, Total Variable Cost; Average Cost; Average Fixed Cost, Average Variable Cost and Marginal Cost - meaning and their relationships
- Revenue–Total Revenue, Average Revenue and Marginal Revenue-meaning and their relationship.
- Producer's Equilibrium - meaning and its conditions in terms of Marginal Revenue-Marginal Cost approach
- Supply market supply, determinants of supply, supply schedule, supply curve and its slope, movements along and shifts in supply curve, price elasticity of supply; measurement of price elasticity of supply - percentage-change method.

Unit 04: Forms of Market and Price Determination.

- Perfect competition - Features; Determination of market equilibrium and effects of shifts in demand and supply. (Short Run Only)
- Simple Applications of Demand and Supply: Price ceiling, Price floor.

Part B: Introductory Macroeconomics

Unit5: National Income and Related Aggregates.

- What is macro-economics?
- Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation.
- Circular flow of income (two sector model); Methods of calculating National Income –Value Added method, Expenditure and income methods
- Aggregates related to National Income:
- Gross National Product (GNP), Net National Product (NNP), Gross Domestic Product (GDP) and Net Domestic Product (NDP) - at market price, at factor cost; Real and Nominal GDP
- GDP Deflator, GDP and Welfare
-

Unit 6: Money and Banking.

- Money – meaning and functions, supply of money - Currency held by the public and net demand deposits held by commercial banks.
- Money creation by the commercial banking system.
- Central bank and its functions (example of Reserve Bank of India): Bank of issue, Govt. Bank, Bankers Bank, Control of Credit through Bank Rate, Cash Reserve Ratio (CRR), Statutory

Liquidity Ratio (SLR), Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.

Unit 7: Determination of Income and Employment.

- Aggregate demand and its components.
- Consumption Function- Meaning
- Propensity to consume and propensity to save (average and marginal)
- Short-run equilibrium output; investment multiplier and its mechanism.
- Meaning of full employment and involuntary unemployment.
- Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply.

Unit 8: Government Budget and the Economy.

Government budget-meaning, objectives and components.

- Classification of receipts - revenue receipts and capital receipts; Classification of expenditure— revenue expenditure and capital expenditure
- Classification of expenditure—revenue expenditure and capital expenditure.
- Balanced, Surplus and Deficit Budget— measures of government deficit.

Unit9: Balance of Payments.

- Balance of payments account-meaning and components;
- Balance of payments—Surplus and Deficit
- Foreign exchange rate-meaning of fixed and flexible rates and managed floating
- Determination of exchange rate in a free market, Merits and

demerits of flexible and fixed exchange rate.

- Managed Floating exchange rate system

Scheme of assessment

Question paper contains four sections namely

1. **Section –A** contains 10 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 10 = 10$ marks
2. **Section- B** contains 10 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 10 = 20$ marks
3. **Section – C** contains 8 Short Answer type questions of 4 marks each to be answered in 100 to 150 words. $4 \times 8 = 32$ marks
4. **Section - D** contains 3 Long Answer type questions of 6 marks each to be answered in 150 to 200 words. $6 \times 3 = 18$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

Part-C Project Work (Internal: 20 Marks)

The students will do the project on the themes, which have primary data, secondary data or both. Case studies of a few organization/ outlets may also be encouraged. Some of the examples of the projects are as follows (they are not mandatory but suggestive);

1. Industrial sector in Jammu and Kashmir economy (handicrafts, handlooms, and other micro small and medium enterprises)
2. Health sector of Jammu and Kashmir
3. Education sector of Jammu and Kashmir
4. Structure and analysis of Jammu and Kashmir Budget
5. Cashless Economy
6. Sustainable Development Goals.

Guidelines for Project Work

The objectives of the project work are to enable learners to

- Probe deeper into theoretical concepts learnt in classes XI and XII

- Analyse and evaluate real world economic scenarios using theoretical constructs and arguments
- Demonstrate the learning of economic theory
- Follow up aspects of economics in which learners have interest
- Develop the communication skills to argue logically
- The project work will be a mini study in to sensitize the students to inculcate research aptitude among students.

It is advisable to conduct the project work within the district. The students may do field visits/ industrial tours/ market visits, etc.

The expectations of the project work are that:

- The teacher will divide the students in groups. Each group will comprise five students or less depending on the number of students in the classroom. Separate topics shall be assigned to each group.
- Learners will complete only ONE project in each academic session.
- Project should be of 2500-5000 words (excluding diagrams & graphs) neatly typed on A4 format

The learners will maintain a proper reference and bibliography

Role of the teacher:

The teacher plays a critical role in developing thinking skills based on objectives, research methodology, collection of data etc. of the learners.

Besides a teacher should:

- Help each learner select the topic based on recently published extracts from the news media, government policies, RBI bulletin, NITI Aayog reports, IMF/World Bank reports etc., after detailed discussions and deliberations of the topic
- Play the role of a facilitator and supervisor to monitor the project work of the Learner through regular discussions and presentations.
- Guide the research work in terms of sources for the relevant data
- Educate learner about plagiarism and the importance of quoting the source of the information to ensure authenticity of research



work

- Prepare the learner for the presentation of the project work
- Arrange a presentation of the project file
- The teacher will narrow down the scope and the practicability of the project work in accordance with the research objectives and questions of the study.
- The teacher will sensitise the learners regarding MLA and APA referencing style

Format of the project:

Learners may work up on the following steps as a suggested below:

1. Choose a title/topic
2. Research design
3. Research objectives/ questions
4. Methodology
5. Sampling
6. Data collection technique
7. Analysis of data
8. Presentation and interpretation of data
9. Draw the relevant conclusion
10. Future scope of the study.

Expected Checklist:

- Introduction of topic/title
- Identifying the causes, consequences and/or remedies
- Various stakeholders and effect on each of them
- Advantages and disadvantages of situations or issues identified
- Short-term and long-term implications of economic strategies suggested in the course of research
- Validity, reliability, appropriateness and relevance of data used for research work and for presentation in the project file

- Presentation and writing that is succinct and coherent in project file
- Citation of the materials referred to, in the file in footnotes, resources section, bibliography etc.

Mode of presentation/submission of the Project:

At the beginning, middle and end of the project work, learners/ groups will present their research topic, introduction, objectives, methodology, etc. in the form of power point presentations and incorporate all relevant suggestions in the final Project File to be submitted to the teacher/internal examiner. The objective of presenting the work is to learn from feedback, suggestions, etc. and engage in thorough and meaningful discussions to develop critical thinking and better insight. The Internal Examiner should ensure that the study submitted by the learner is his/her own original work. In case of any doubt, authenticity should be checked and verified.

Distribution of Marks:

1. Project work	15 marks
(i) Statement of problem	03 marks
(ii) Methodology	04 marks
(iii) Data analysis	04 marks
(iv) Conclusion	02 marks
(v) References	02 marks
2. Viva-Voce based on the Project work	03 marks
3. Attendance	02 marks

BOOKS PRESCRIBED:

1. *Introductory Microeconomics by NCERT, New Delhi.*
2. *Introductory Macroeconomics by NCERT, New Delhi*

GEOGRAPHY

Maximum Marks: 100
Practicals: 30 Marks

Theory: 70 Marks
Time: 3 Hours

Unit I: Human Geography: Nature and Scope

Marks 03

Unit II: People.

Marks 06

- Population of the world–distribution, density and growth.
- Population change–spatial patterns and structure, determinants of population change.
- Human development–concept, selected indicator, international comparisons.

Unit III: Human Activities.

Marks 12

- Primary activities – concept and changing trends, gathering, pastoral, mining, subsistence agriculture, modern agriculture; people engaged in agriculture and allied activities – some examples from selected countries.
- Secondary activities – concept, manufacturing: agro – processing, household, small scale, large scale: people engaged in secondary activities – some examples from selected countries.
- Tertiary activities – concept: trade, transport and communication: services; people engaged in tertiary activities – some examples from selected countries.
- Quaternary activities – concept: knowledge-based industries: people engaged in quaternary activities – some examples from selected countries.

Unit IV: Transport, Communication and Trade.

Marks 12

- Land transport–roads, railways–rail network, trans–continental railways,
- Water transport–inland waterways: major ocean routes.
- Air transport–Intercontinental air routes,
- Oil and gas pipelines.
- Satellite communication and cyberspace,
- International trade–Basis and changing patterns; ports as gateways of international trade, role of WTO in International trade.

**Unit V: Map work on identification of features based on above units on the
Outline political map of world.**

Marks 02

India- People and Economy

Unit VI: People.

Marks 05

- Population–distribution, density and growth: composition of population: Linguistic, sex and religious; rural – urban population change through time – regional variations: occupations.
- Population, environment and development.

Unit VII: Human Settlements.

Marks 04

- Rural settlements–types and distribution.
- Urban settlements–types, distribution and functional classification.

Unit VIII: Resources and Development.

Marks 10

- Land resources–general land use; agricultural land use–major crops; agricultural development and problems, common property resources.
- Water resources–availability and utilization–irrigation, domestic, industrial and other uses; scarcity of water and conservation methods –rain water harvesting and watershed management (one case study related with participatory watershed management to be introduced)
- Mineral and energy resources–metallic and non–metallic minerals and their distribution; Conventional and non–conventional energy sources.
- Planning in India–target area planning (case study); idea of sustainable development (case study).

Unit IX: Transport, Communication and International Trade.

Marks 08

- Transport and communication–roads, railways, waterways and airways; oil and gas pipelines; national electric grids; communication networking – radio, television, satellite and internet.
- International trade – changing pattern of India’s foreign trade; seaports and their hinterland and airports.

Unit X: Geographical Perspective on Selected Issues and Problems.

Marks 05

(One case study to be introduced for each topic)

- Environmental pollution: urban–waste disposal.
- Urbanization–rural–urban migration; problem of slums;
- Land Degradation.

Unit XI: Map work on locating and labeling of features based on above units on the outline political map of world.

Marks 03

Scheme of assessment

Question paper contains four sections namely

1. **Section –A** contains 10 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 10 = 10$ marks
2. **Section- B** contains 9 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 9 = 18$ marks
3. **Section – C** contains 9 Short Answer type questions of 3 marks each to be answered in 100 to 150 words. $3 \times 9 = 27$ marks
4. **Section - D** contains 3 Long Answer type questions of 5 marks each to be answered in 150 to 200 words. $5 \times 3 = 15$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

C. Practical Work.

Marks 30

Internal assessment: 10 marks

External assessment: 20 marks

Unit I: Processing of Data and Thematic Mapping.

Marks 15

- Sources of data.
- Tabulating and processing of data; calculation of averages, measures of central tendency, deviation and rank correlation.
- Representation of data—construction of diagrams: bars, circles and flow chart; thematic maps; construction of dot; choropleth and isopleth maps.

Practical Record Book and Viva–voce.

Marks 05

BOOKS PRESCRIBED:

1. *Fundamentals of Human Geography, Textbook of Class XII, Published by NCERT, New Delhi.*
2. *Practical work in Geography Part II, Textbook of Class XII, Published by NCERT, New Delhi.*
3. *India People and Economy, Textbook in Geography for Class XII, Published by NCERT, New Delhi.*

POLITICAL SCIENCE

M. Marks: 100 Marks
Theory: 80 Marks

Time: 3 Hours
Project: 20 Marks

Part A: Contemporary World Politics.

- 1. Disintegration of the "Second World " and the Collapse of Bipolarity. Marks 06**
New entities in world politic: Russia, Balkan states and Central Asian states. Introduction of democratic politics and capitalism in post – communist regimes. India's relation with Russia and other post – communist countries.
- 2. Alternative Centres of Economic and Political Power. Marks 06**
Rise of China as an economic power in post – Mao era, creation and expansion of European Union, ASEAN. India's changing relations with China.
- 3. South Asia in the Post – Cold War Era. Marks06**
Democratisation and its reversals in Pakistan and Nepal. Ethnic conflict in Sri Lanka, Impact of economic globalization on the region. Conflicts and efforts for peace in South Asia. India's relations with its neighbours.
- 4. International Organizations in a Unipolar World. Marks 06**
Restructuring and the future of the UN. India's position in the restructured UN. Rise of new international actors; New international economic organizations, NGO's. How democratic and accountable are the new institutions of global governance?
- 5. Security in Contemporary World. Marks 06**
Traditional concerns of security and politics of disarmament. Non-traditional or human security: global poverty, health and education. Issues of human rights and migration.
- 6. Globalization and its Critics. Marks 04**
Economic, cultural and political manifestations. Debates on the nature of consequences of globalization. Anti – globalization movements. India as an arena of globalization and struggle against it.

7. Environmental and Natural Resources in Global Politics.

Marks 06

Environment movement and evolution of global environmental norms. Conflicts over traditional and common property resources. Rights of indigenous people. India's stand in global environmental debates.

Part B: Politics in India since Independence.

8. Nation-Building and Its Problems.

Marks 06

Nehru's approach to nation-building: Legacy of partition: challenge of 'refugee' resettlement, the Kashmir problem. Organization and reorganization of states; Political conflicts over language.

9. Era of One – Party Dominance.

Marks 04

First three general elections, nature of Congress dominance at the national level, uneven dominance at the state level, coalitional nature of Congress. Major opposition parties.

10. Politics of Planned Development.

Marks 02

Five-year plans, expansion of state sector and the rise of new economic interests. Famine and suspension of five-year plans. Green revolution and its political fallouts.

11. India's External Relations.

Marks 06

Nehru's foreign policy. Sino-Indian war of 1962, Indo-Pak war of 1965 and 1971. India's nuclear programme and shifting alliances in world politics.

12. Challenge to and Restoration of Congress System.

Marks 05

Political succession after Nehru. Non – Congressism and electoral upset of 1967, Congress split and reconstitution. Congress' victory in 1971 elections, politics of "garibi hatao"

13. Crisis of the Constitutional Order.

Marks 04

Search for 'committed' bureaucracy and judiciary. Navnirman movement in Gujarat and the Bihar movement. Emergency context constitutional and extra – constitutional dimensions, resistance to emergency. 1977 elections and the formation of Janata Party. Rise of civil liberties organizations.

14. Regional Aspirations and Conflicts.

Marks 06

Rise of regional parties. Punjab crisis. The Kashmir situation. Challenges and responses in the North East.

15. Recent Developments in Indian Politics.

Marks 07

Participatory upsurge in 1990s, Rise of the JD and the BJP. Increasing role of regional parties and coalition politics. UF and NDA governments. Elections 2004 and UPA governments.

Scheme of assessment

Question paper contains five sections namely

1. **Section –A** contains 10 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 10 = 10$ marks
2. **Section- B** contains 9 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 9 = 18$ marks
3. **Section – C** contains 7 Short Answer type questions of 4 marks each to be answered in 100 to 150 words. $4 \times 7 = 28$ marks
4. **Section - D** contains 1 Passage having three questions of 2 marks each to be answered in 20 to 30 words. $2 \times 3 = 6$ marks
5. **Section - E** contains 3 Long Answer type questions of 6 marks each to be answered in 150 to 200 words. $6 \times 3 = 18$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.


Project work (Internal): 20 marks

List of Suggested Topics

1. Division of Germany with special focus on the construction and dismantling of the Berlin Wall.
2. CIS-Central Asian Republics
3. Disintegration of USSR with special focus on Gorbachev.
4. Arab Spring
5. Cover the negative as well as positive aspects of relationship between India and the following countries.

Focus on any one of the following (current updates should be highlighted):

- a) Relationship between India and Russia
- b) Relationship between India and China
- c) Relationship between India and Pakistan
- d) Relationship between India and Bangladesh

- 
7. ASEAN
 8. European Union and BREXIT
 9. BRICS
 10. SAARC
 11. India's Nuclear Policy
 12. United Nations with focus on India's candidature in Security Council.
 13. UN Agencies – UNICEF, UNESCO, WHO
 14. Pandemics: Covid 19- Its global impact (focus on worldwide cooperation and preparedness along with controversies (please collect newspaper clippings for the same)
 15. Partition of India-Theory behind it and its legacy
 16. Comparison between NITI AAYOG and Planning Commission and their contribution in India's Development.
 17. Election 2019- Rise of BJP and Downfall of Congress (1989-2019).
 18. Emergency – A blot on Indian Democracy
 19. NDA III and NDA IV – Social and Economic welfare programmes.

Distribution of Marks

- Internal Project File **10 Marks**
- Viva-Voce **10 Marks**

BOOKS PRESCRIBED:

1. *Contemporary World Politics-A* Published by NCERT New Delhi
2. *Politics in India Since Independence*, Published by NCERT New Delhi

PSYCHOLOGY

Maximum Marks: 100
Theory: 70 Marks

Time: 3 Hours
Practicals: 30 Marks

UNIT I: INTELLIGENCE AND APTITUDE

The unit aims at studying how people differ with respect to Intelligence and Aptitude.

- Concept of Intelligence.
- Theories of Intelligence: Theory of multiple intelligence, Triarchic theory of intelligence, PASS model of intelligence.
- Culture and Intelligence, Tests of Intelligence.
- Aptitude: Nature and Types.
- Giftedness (nature and identification).
- Individual differences (heredity–environmental interaction). **10 marks**

UNIT II: SELF AND PERSONALITY

The unit focuses on the study of self and personality in the context of different approaches in an effort to appraise the person.

- Concept of self, self-efficiency, self-regulation and techniques.
- Concept of Personality, theories of Personality (Trait and types, Psychoanalytic, Humanistic).
- Assessment of Personality: Self report measures, Projective techniques. **09 marks**

UNIT III: MEETING LIFE CHALLENGES

The aim of this unit is to study adjustment, stress and coping strategies. Health and well– being is also discussed.

- Concept of adjustment.
- Stress: Meaning, Sources and Types, Coping strategies.
- Concept of health and well– being. **08 marks**

UNITIV: PSYCHOLOGICAL DISORDERS

The unit discusses the concepts of normality and abnormality and some Psychological Disorders.

- Concept of normality and abnormality, Causal factors associated with psychological disorders.
- Classification of psychological disorders.
- Major psychological disorders: Anxiety, Schizophrenia (meaning and symptoms).
- Mood disorders, behavioral, substance related. **09 marks**

UNIT V: THERAPEUTIC APPROACHES

The unit discusses the goals, techniques and effectiveness of different approaches used to treat psychological disorders.

- Goals and objectives of therapeutic processes, stages of therapeutic relationships.
 - Types of therapies: Humanistic, Cognitive, Behavior, Yoga & Meditation.
 - Rehabilitation of mentally ill patients.
- 09 marks

UNIT VI: ATTITUDE AND SOCIAL COGNITION

The unit focuses on the formation and change of attitudes, cultural influences on attributional tendencies and conditions influencing pro – social behavior.

- Nature and components of attitude, attitude–formation and change.
 - Attribution
 - Prejudice and discrimination, Strategies for handling prejudice.
- 09 marks

UNIT VII: GROUP PROCESSES AND SOCIAL INFLUENCE

The unit deals with the concept of group, its functions and the dynamics of social influence. Different conflict resolution strategies will also be discussed.

- Meaning of group, group behavior, factors influencing group formation, types of groups.
 - Social influence processes.
- 07 marks

UNIT VIII: STATISTICS

The aim of this unit is to introduce the importance of different statistical measures used in Psychology.

- Meaning of Statistics, types of Statistics, preparation of frequency distribution.
 - Measures of central tendency: Mean Median and Mode.
 - Measures of variability: Range, S.D, Q.D, Average Deviation.
- 09 marks

Scheme of assessment

Question paper contains four sections namely

1. **Section –A** contains 10 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 10 = 10$ marks
2. **Section- B** contains 9 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 9 = 18$ marks
3. **Section – C** contains 9 Short Answer type questions of 3 marks each to be

answered in 100 to 150 words. $3 \times 9 = 27$ marks

4. **Section - D** contains 3 Long Answer type questions of 5 marks each to be answered in 150 to 200 words. $5 \times 3 = 15$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

PRACTICALS

External= 20

Internal= 10

Total=30

- One case profile (Developmental history of the subject, using qualitative and quantitative approaches)
- Practicals (intelligence, personality, aptitude, adjustment, attitude, self-concept, Stress and anxiety)
- **Distribution of Marks (External):**

(i)	Case Profile:	03 marks
(ii)	Practical File:	03 marks
(iii)	Viva-Voce:	04 marks
(iv)	Two Practicals	10 marks

BOOK PRESCRIBED:

1. *A textbook of Psychology for Class XII published by NCERT, New Delhi.*

SOCIOLOGY

Maximum Marks: 100
Theory: 80 Marks

Time: 3 Hours
Practicals: 20 Marks
Internal: 05
External: 15

INDIAN SOCIETY

Unit1: Introducing Indian Society

Non-Evaluative

- Unity in Diversity in India.
- Geographical, Cultural, Religious and Linguistic.
- Ethnic Composition of J&K.

Unit 2: Demography and Society

08 Marks

- Demography: Concept, Variables (Indicators) and Trends.
- Theories of Population: Malthusian Theory; Demographic Transition Theory.
- National Population Policy of India (2011).
- Population Composition of J&K.

Unit3: Social Institutions

08 Marks

- Family: Concept and Functions.
- Marriage: Concept and Types.
- Caste System: Concept, Characteristics, Change and Continuity.

Unit4: Social Inequality

08 Marks

- Meaning and Definition of Social Inequality.
- Tribals: Definition and Characteristics; Distribution; Marginalization of Tribal Communities.
- Religious Minorities.
- The Differently Abled.
- Struggle for Equality of Women.

Unit5: Challenges to National Integration

08 Marks

- Communalism.
- Regionalism.
- Casteism.
- Role of State: Constitutional and Legal Measures.

Unit6: Methodology

08 Marks

- Research: Concept and Features.
- Importance of Social Research.
- Steps/Stages of Social Research.
- Sampling: Stratified and Non- Stratified.
- Techniques of Data Collection: Observation, Interview, Schedule, Questionnaire.

SOCIAL CHANGE AND DEVELOPMENT IN INDIAN SOCIETY

Unit7: Processes of Social Change in India

08 Marks

- Modernization.
- Industrialization and Urbanization.
- Sanskritisation.
- Westernization.

Unit 8: Change and Development in Rural Society

08 Marks

- Rural Society: Meaning and Features.
- Land Reforms with Special Reference to J&K.
- Green Revolution: Significance and Adverse
- Effects. 73rd Amendment Act: Panchayati Raj Institution.

Unit 9: Globalization and Social Change

08 Marks

- Globalization: Meaning and
- Concept. Economic Globalization.
- Cultural
- Globalization.
- Political Globalization.

Unit 10: Mass Media and Society

08 Marks

- Mass Media: Concept and Classification.
- Role of Mass Media in Modern India (Environmental protection, Gender Health Sensitisation, Education)
- Social Media: Emergence, Merits and Demerits.

Unit 11: Social Movements

08 Marks

- Class Movement: Peasant Movement (Meaning, Impact and
- Trends). Caste Movement: Dalit movement (Meaning, Impact
- and Trends).
- Environmental Movement: Meaning, Impact and Trends (Chipkoo Movement).

Scheme of assessment

Question paper contains four sections namely

1. **Section –A** contains 10 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 10 = 10$ marks
2. **Section- B** contains 10 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 10 = 20$ marks
3. **Section – C** contains 8 Short Answer type questions of 4 marks each to be answered in 100 to 150 words. $4 \times 8 = 32$ marks
4. **Section - D** contains 3 Long Answer type questions of 6 marks each to be

answered in 150 to 200 words. 6 x 3 = 18 marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

Practical Examination

Max. Marks: 20

Time Allotted: 3 Hours

External: 15 Marks

Internal: 5 Marks

INTERNAL:

A. Project (undertaken during the academic year at school level) 5 marks

- | | | |
|------|--------------------------|----------|
| I. | Statement of the Problem | 1 ½marks |
| II. | Methodology/Technique | 1 ½marks |
| III. | Conclusion | 2 marks |

EXTERNAL:

B. Viva-based on the project work 5 marks

C. Research Design 10 marks

- | | | |
|----|------------------------------------|---------|
| a. | Overall format | 2 marks |
| b. | Research Questions | 2 marks |
| c. | Choice of Technique | 2 marks |
| d. | Detailed Procedure | 2 marks |
| e. | Limitations of the above technique | 2 marks |

B and C to be administered on the day of the external examination.

BOOKS PRESCRIBED:

- *A Textbook of Indian Society for Class XII Published by NCERT, New Delhi.*
- *Social Change and Development in India for Class XII Published by NCERT, New Delhi.*

NOTE: LIST OF DELETED TOPICS FROM THE PRESCRIBED BOOKS FROM PAGE NO. 72 TO 76.

MATHEMATICS

Theory: Marks 80
Project Work: 20 Marks

Time Allowed: 3 hrs.

I.	RELATIONS AND FUNCTIONS	Marks 08
II.	ALGEBRA	Marks 10
III.	CALCULUS	Marks 35
IV.	VECTORS AND THREE-DIMENSIONAL GEOMETRY	Marks 14
V.	LINEAR PROGRAMMING	Marks 05
VI.	PROBABILITY	Marks 08

UNIT I. RELATIONS AND FUNCTIONS.

1. Relations and Functions:

Types of Relations: Reflexive, symmetric, transitive and equivalence relations. One to one and onto Functions.

2. Inverse Trigonometric Functions:

Definition, range, domain, principal value branch. Graphs of inverse trigonometric functions.

UNIT II. ALGEBRA

1. Matrices.

Concept, notation, order, equality, types of matrices, zero matrix, transpose of a matrix, symmetric and skew symmetric matrices. Addition, multiplication and scalar multiplication of matrices, simple properties of addition, multiplication and scalar multiplication. Non-commutativity of multiplication of matrices and existence of non-zero matrices whose product is the zero matrix (restrict to square matrices of order 2). Concept of elementary row and column operations. Invertible matrices and proof of the uniqueness of inverse, if it exists; (Here all matrices will have real entries).

2. Determinants.

Determinant of a square matrix (upto 3x3 matrices), minors, cofactors and applications of determinants in finding the area of a triangle, Adjoint and inverse of a square matrix. Consistency, inconsistency and number of solutions of system of linear equations by examples, solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix.

UNIT III: CALCULUS

1. Continuity and Differentiability.

Continuity and differentiability, chain rule, derivatives of inverse trigonometric functions like $\sin^{-1}x$, $\cos^{-1}x$ and $\tan^{-1}x$, derivative of implicit functions. Concept of exponential and logarithmic functions and their derivatives. Logarithmic differentiation. Derivative of functions expressed in parametric forms. Second

order derivatives.

2. Applications of Derivatives.

Applications of derivatives: rate of change of quantities, increasing/decreasing functions, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that illustrate basic principles and understanding of the subject as well as real-life situations).

3. Integrals.

Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts. Evaluation of simple integrals of the following types and problem based on them to be evaluated.

$$\int \frac{dx}{x^2 \pm a^2}, \int \frac{dx}{\sqrt{x^2 \pm a^2}}, \int \frac{dx}{\sqrt{a^2 - x^2}}, \int \frac{dx}{ax^2 + bx + c}, \int \frac{dx}{\sqrt{ax^2 + bx + c}}$$

$$\int \frac{(px + q)}{ax^2 + bx + c} dx, \int \frac{(px + q)}{\sqrt{ax^2 + bx + c}} dx, \int \sqrt{a^2 \pm x^2} \cdot dx, \int \sqrt{x^2 - a^2} dx,$$

Fundamental Theorem of Calculus (without proof), Basic properties of definite integrals and evaluation of definite integrals.

4. Applications of the Integrals.

Applications in finding the area under simple curves, especially lines, circles/parabolas / ellipses (in standard form only)

5. Differential Equations.

Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables, Solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type:

$$dy/dx + py = q, \text{ where } p \text{ and } q \text{ are functions of } x \text{ or constants.}$$

$$dx/dy + px = q, \text{ where } p \text{ and } q \text{ are functions of } y \text{ or constants}$$

UNIT IV: VECTORS AND THREE-DIMENSIONAL GEOMETRY

1. Vectors.

Vectors and scalars, magnitude and direction of a vector. Direction cosines/ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors), position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical

Interpretation, properties and application of Scalar (dot) product of vectors.
Vector (cross) product of vectors.

2. Three-dimensional Geometry.

Direction cosines and direction ratios of a line joining two points. Cartesian and vector equation of a line, skew lines, shortest distance between two lines. Angle between the two lines.

UNIT V: LINEAR PROGRAMMING

1. Linear Programming.

Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bound and unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints).

UNIT VI: PROBABILITY

1. Probability.

Multiplication theorem on probability. Conditional probability, independent events, total probability. Baye's Theorem, Random variable and its probability distribution, mean of random variable.

Scheme of assessment

Question paper contains four sections namely

1. **Section –A** contains 10 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 10 = 10$ marks
2. **Section- B** contains 10 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 10 = 20$ marks
3. **Section – C** contains 8 Short Answer type questions of 4 marks each to be answered in 100 to 150 words. $4 \times 8 = 32$ marks
4. **Section - D** contains 3 Long Answer type questions of 6 marks each to be answered in 150 to 200 words. $6 \times 3 = 18$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

INTERNAL ASSESSMENT	20 MARKS
Periodic Tests (Best 2 out of 3 tests conducted)	10 Marks
Mathematics Activities	10 Marks

Note: For activities NCERT Lab Manual may be referred.

Conduct of Periodic Tests:

Periodic Test is a Pen and Paper assessment which is to be conducted by the respective subject teacher. The format of periodic test must have questions items with a balance mix, such as, very short answer (VSA), short answer (SA) and long answer (LA) to effectively assess the knowledge, understanding, application, skills, analysis, evaluation and synthesis. Depending on the nature of subject, the subject teacher will have the liberty of incorporating any other types of questions too. The modalities of the PT are as follows:

- Mode:** The periodic test is to be taken in the form of pen-paper test.
- Schedule:** In the entire Academic Year, three Periodic Tests in Mathematics subject may be conducted as follows:

Test	Pre-Mid-term (PT-I)	Mid-Term (PT-II)	Post Mid-Term (PT-III)
Tentative Month	July-August	November	December-January

This is only a suggestive schedule and schools may conduct periodic tests as per their convenience. The winter bound schools would develop their own schedule with similar time gaps between two consecutive tests.

- Average of Marks:** Once schools complete the conduct of all the three periodic tests, they will convert the Weightage of each of the three tests into ten marks each for identifying best two tests. The best two will be taken into consideration and the average of the two shall be taken as the final marks for PT.
- The school will ensure simple documentation to keep a record of performance.
- Sharing of Feedback/Performance:** The students' achievement in each test must be shared with the students and their parents to give them an overview

of the level of learning that has taken place during different periods. Feedback will help parents formulate interventions (conducive ambience, support materials, motivation and morale-boosting) to further enhance learning. A teacher, while sharing the feedback with student or parent, should be empathetic, non-judgmental and motivating

a) Assessment of Activity Work: Throughout the year activities shall be performed by the students from the activities given in the NCERT Laboratory Manual for the respective class (XI or XII). A record of the same may be kept by the student. A year end test on the activity may be conducted.

The Weightage are as under:

- The activities performed by the student throughout the year and record keeping: 5 marks
- Assessment of the activity performed during the year end test: 3 marks
- Viva-voce: 2 marks

BOOKS PRESCRIBED:

- 1) *Mathematics Part-I Textbook for Class XII, NCERT Publication*
- 2) *Mathematics Part-II Textbook for Class XII, NCERT Publication*
- 3) *Mathematics Lab Manual Class XII, published by NCERT*

PHYSICS

Max.Marks: 100

Theory: 70 Marks

Time Allowed: 3hrs

Practicals: 30 Marks

Unit I: Electrostatics

09 marks

Electric Charges and Fields

Electric charges, Conservation of charge, Coulomb's law-force between two- point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field. Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).

Electrostatic Potential and Capacitance

Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two-point charges and of electric dipole in an electrostatic field. Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor (no derivation, formulae only).

Unit II: Current Electricity

07 marks

Current Electricity

Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance, Internal resistance of a cell, potential difference and emf of a cell, Kirchhoff's rules, Wheatstone bridge.

Unit III: Magnetic Effects of Current and Magnetism

09 marks

Moving Charges and Magnetism

Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight

wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields. Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter.

Magnetism and Matter

Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines. Magnetic properties of materials- Para-, dia- and ferro - magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.

Unit IV: Electromagnetic Induction and Alternating Currents

09 marks

Electromagnetic Induction

Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.

Alternating Current

Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current. AC generator, Transformer.

Unit V: Electromagnetic waves

03 marks

Electromagnetic Waves

Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses.

Unit VI: Optics

14 marks

Ray Optics and Optical Instruments

Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses

in contact, refraction of light through a prism. Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Wave Optics

Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima (qualitative treatment only).

Unit VII: Dual Nature of Radiation and Matter

04 marks

Dual Nature of Radiation and Matter

Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light. Experimental study of photoelectric effect Matter waves-wave nature of particles, de-Broglie relation.

Unit VIII: Atoms and Nuclei

08 marks

Atoms

Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit, hydrogen line spectra (qualitative treatment only).

Nuclei

Composition and size of nucleus, nuclear force Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.

Unit IX: Electronic Devices

07 marks

Semiconductor Electronics

Materials, Devices and Simple Circuits Energy bands in conductors, semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic semiconductors- p and n type, p-n junction Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode -diode as a rectifier.

Scheme of assessment

Question paper contains four sections namely

1. **Section –A** contains 10 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 10 = 10$ marks
2. **Section- B** contains 9 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 9 = 18$ marks
3. **Section – C** contains 9 Short Answer type questions of 3 marks each to be answered in 100 to 150 words. $3 \times 9 = 27$ marks
4. **Section - D** contains 3 Long Answer type questions of 5 marks each to be answered in 150 to 200 words. $5 \times 3 = 15$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

PRACTICALS
Time: 03 Hours

Maximum Marks: 30
External: 20 Marks/ Internal: 10 Marks

The record, to be submitted by the students, at the time of their annual examination, has to include:

- Record of at least 8 Experiments [with 4 from each section], to be performed by the students.
- Record of at least 6 Activities [with 3 each from section A and section B], to be performed by the students.
- Report of the project carried out by the students.

Experiments

SECTION–A

1. To determine resistivity of two / three wires by plotting a graph for potential difference versus current.
2. To find resistance of a given wire / standard resistor using metre bridge.
3. To verify the laws of combination (series) of resistances using a metre bridge.

OR

To verify the laws of combination (parallel) of resistances using a metre bridge.

4. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.

5. To convert the given galvanometer (of known resistance and figure of merit) into a voltmeter of desired range and to verify the same.

OR

To convert the given galvanometer (of known resistance and figure of merit) into an ammeter of desired range and to verify the same.

6. To find the frequency of AC mains with a sonometer.

Activities

1. To measure the resistance and impedance of an inductor with or without iron core.
2. To measure resistance, voltage (AC/DC), current (AC) and check continuity of a given circuit using multimeter.
3. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.
4. To assemble the components of a given electrical circuit.
5. To study the variation in potential drop with length of a wire for a steady current.
6. To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

SECTION-B

Experiments

1. To find the value of v for different values of u in case of a concave mirror and to find the focal length.
2. To find the focal length of a convex mirror, using a convex lens.
3. To find the focal length of a convex lens by plotting graphs between u and v or between $1/u$ and $1/v$.
4. To find the focal length of a concave lens, using a convex lens.
5. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.
6. To determine refractive index of a glass slab using a travelling microscope.
7. To find the refractive index of a liquid using convex lens and plane mirror.
8. To find the refractive index of a liquid using a concave mirror and a plane mirror.
9. To draw the I-V characteristic curve for a p-n junction diode in forward and reverse bias.

Activities

1. To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.
2. Use of multimeter to see the unidirectional flow of current in case of a diode and an LED and check whether a given electronic component (e.g., diode) is in working order.
3. To study effect of intensity of light (by varying distance of the source) on an LDR.
4. To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.
5. To observe diffraction of light due to a thin slit.
6. To study the nature and size of the image formed by a
 - (i) Convex lens, or
 - (ii) Concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror).
7. To obtain a lens combination with the specified focal length by using two lenses from the given set of Lenses.

Suggested Investigatory Projects

1. To study various factors on which the internal resistance/EMF of a cell depends.
2. To study the variations in current flowing in a circuit containing an LDR because of a variation in
 - (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance).
 - (b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR.
3. To find the refractive indices of
 - (a) Water
 - (b) Oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle.
4. To investigate the relation between the ratio of
 - (i) Output and input voltage and
 - (ii) Number of turns in the secondary coil and primary coil of a self-designed transformer.
5. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.
6. To estimate the charge induced on each one of the two identical Styrofoam (or pith)

balls suspended in a Vertical plane by making use of Coulomb's law.

7. To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/ (bulb) in a circuit fed up by an A.C. source of adjustable frequency.

8. To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

Practical Examination for Visually Impaired Students

Evaluation Scheme

Time 2 hours

Max. Marks: 30

General Guidelines

- The practical examination will be of two-hour duration.
- A separate list of ten experiments is included here.
- The written examination in practical for these students will be conducted at the time of practical examination of all other students.
- The written test will be of 30 minutes duration.
- The question paper given to the students should be legibly typed. It should contain a total of 15 practical skill based very short answer type questions. A student would be required to answer any 10 questions.
- A writer may be allowed to such students as per CBSE examination rules.
- All questions included in the question papers should be related to the listed practicals.

Every question

should require about two minutes to be answered. These students are also required to maintain a practical file.

- A student is expected to record at least five of the listed experiments as per the specific instructions for each subject.
- These practical should be duly checked and signed by the internal examiner.
- The format of writing any experiment in the practical file should include aim, apparatus required, simple theory, procedure, related practical skills, precautions etc.
- Questions may be generated jointly by the external/internal examiners and used for assessment. The Viva Questions may include questions based on basic theory/principle/concept, apparatus/ Materials/chemicals required procedure, precautions, sources of error etc.

BOOK PRESCRIBED:

1. *A Textbook of Physics for class XII published by NCERT, New Delhi*



CHEMISTRY

Max.Marks: 100
Theory: 70 Marks

Time Allowed: 3 hrs
Practicals: 30 Marks

Unit-I: SOLUTIONS

07 Marks

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, colligative properties: relative lowering of vapor pressure of a solution, Raoult's law, elevation of boiling point, depression in freezing point temperature and osmotic pressure), determination of molecular masses using colligative properties. Abnormal molecular mass, Van't Hoff factor and calculations involving it.

Unit-II: ELECTROCHEMISTRY

09 Marks

Redox reactions, conductance in electrolytic solutions, specific conductivity, molar conductivity, variation of conductivity with concentration, Kohlrausch's law and its applications Electrolysis and laws of electrolysis (elementary idea), dry cell-electrolytic cells and galvanic cells; Lead accumulator, emf of a cell, standard electrode potential, Nernst equation and its application to Chemical cells, relation between Gibb's energy change and emf of a cell, fuel cells, corrosion

Unit-III: CHEMICAL KINETICS

07 Marks

Rate of reaction (average and instantaneous rate of a reaction), factors affecting rate of reactions: (concentration, temperature, catalyst), rate law, specific rate constant and order, molecularity of a reaction, integrated rate expression of zero and first order reactions and their derivations, half-life period. Concept of collision theory (elementary idea, no mathematical derivation). Activation energy, Arrhenius equation.

Unit-IV: d and f-BLOCK ELEMENTS

07 Marks

General introduction, electronic configuration, occurrence and characteristics of the transition metals, general trends in properties of first row transition metals (metallic character, IE, electrode potential, oxidation state, ionic radii, catalytic properties, colored ions, complex formation, magnetic properties, interstitial compounds, alloy formation). Preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$ Lanthanides: electronic configuration, oxidation state, chemical reactivity and lanthanide contraction and its consequences. Actinides- electronic configuration, oxidation states and comparison with lanthanoids.

Unit- V: CO-ORDINATION COMPOUNDS

07 Marks

Co-ordination compounds: Introduction, ligands, co-ordination number, color, magnetic properties and shapes, IUPAC nomenclature of mononuclear co-ordination compounds. Bonding (Werner's theory, VBT and CFT), structural and stereoisomerisms, importance of coordination compounds in qualitative inclusion of analysis, extraction of metals and biological systems.

Unit-VI: HALOALKANES AND HALOARENES

06 Marks

Haloalkanes: Nomenclature, nature of C-X bond, physical & chemical properties, mechanism of substitution reactions. Stability of carbocations, R-S and d-1 configurations

Haloarenes: Nature of C-X bond, substitution reactions (directive influence of halogens for mono substituted compounds only), Stability of carbocations, R-S and D-L configurations
Uses and environmental effects of-dichloromethane, trichloromethane, tetrachloromethane, iodoform, freon, and DDT

Unit- VII: ALCOHOLS, PHENOLS AND ETHERS

06 Marks

Alcohols: Nomenclature, methods of preparation, physical & chemical properties (of primary alcohols only), identification of primary, secondary & tertiary alcohols; mechanism of dehydration of alcohols. Uses, some important compounds - methanol and ethanol.

Phenols: Nomenclature, methods of preparation, physical & chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols.

Ethers: Nomenclature, methods of preparation, physical & chemical properties and uses.

UNIT-VIII: ALDEHYDES, KETONES AND CARBOXYLIC ACIDS

08 Marks

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical & chemical properties & mechanism of nucleophilic addition reaction to C=O group, reactivity of alpha hydrogen in aldehydes, uses

Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical & chemical properties and uses

UNIT-IX: ORGANIC COMPOUNDS CONTAINING NITROGEN

06 Marks

Amines: Nomenclature, classification, structure, methods of preparation, physical & chemical properties, uses, identification of primary, secondary & tertiary amines.

Cyanides and Isocyanides: Structures of cyanide and isocyanide groups, nomenclature, preparation, physical properties and chemical reactions

Diazonium Salts: Preparation and chemical reactions (mechanism of diazotization), and importance aesthetic organic chemistry

UNIT-X: BIOMOLECULES

07 Marks

Carbohydrates: Classification (aldoses and ketoses), mono saccharides: Glucose, fructose: structure, preparation and chemical reactions, oligosaccharides (sucrose, lactose & maltose) Polysaccharides: (starch cellulose and glycogen); importance.

Proteins: Elementary idea of amino acids: peptide bond, polypeptides and primary, secondary, tertiary and quaternary structure of proteins (Qualitative idea only), denaturation of proteins; enzymes, lipids & hormones, their classification & functions.

Nucleic Acids: DNA and RNA (purines and pyrimidines, nucleosides, nucleotides and fragments up to four nucleotides).

Vitamins: Classification and functions, sources and deficiency diseases.

Scheme of assessment

Question paper contains four sections namely

1. **Section –A** contains 10 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 10 = 10$ marks
2. **Section- B** contains 9 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 9 = 18$ marks
3. **Section – C** contains 9 Short Answer type questions of 3 marks each to be answered in 100 to 150 words. $3 \times 9 = 27$ marks
4. **Section - D** contains 3 Long Answer type questions of 5 marks each to be answered in 150 to 200 words. $5 \times 3 = 15$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

PRACTICALS

Internal: 10

External: 20

Evaluation Scheme for Practical Examination: (External)

Volumetric analysis

06 marks

Salt Analysis

06 marks

Content based experiment

04 marks

Class record, Project work and viva

04 marks

Total =20 marks

A. CHEMICAL KINETICS

i) Effect of concentration and temperature on the rate of reaction between sodium thiosulphate and Hydrochloric acid.

ii) Study of reaction rates of any one of the following:

a) Reaction of iodide ions with hydrogen peroxide at room temperature using different concentration of iodide ions.

b) Reaction between potassium iodate (KIO_3) and sodium sulphite (Na_2SO_3) using starch solution as Indicator (clock reaction).

B. THERMODYNAMICS

Any one of the following experiments:

i) Enthalpy of dissolution of $CuSO_4$ or KNO_3

ii) Enthalpy of neutralization of strong acid (HCl) and strong base (NaOH).

iii) Determination of enthalpy change during interaction (Hydrogen bond formation) between acetone & chloroform.

C. ELECTRO CHEMISTRY

i) Variation of cell potential in $Zn/Zn^{2+} // Cu^{2+}/Cu$ with change in concentration of electrolytes ($CuSO_4$ or $ZnSO_4$) at room temperature.

D. PREPARATION OF INORGANIC COMPOUNDS

i) Preparation of double salt of ferrous ammonium sulphate or potash alum.

ii) Preparation of potassium ferric oxalate.

E. TEST FOR THE FUNCTIONAL GROUPS PRESENT IN ORGANIC COMPOUNDS

Unsaturation, alcoholic, phenolic, aldehydic, ketonic, carboxylic and amino (primary) groups.

F. Study of carbohydrates, fats and proteins in pure form and detection of their presence in given Foodstuffs.

G. Determination of concentration/ molarity of $KMnO_4$ solution by titrating it against a

standard solution of:

- i) Oxalic acid
- ii) Ferrous ammonium sulphate.

H. Qualitative Analysis

Determination, of one cation and one anion in a given salt (insoluble salts to be excluded).

Cations: Pb^{2+} , Cu^{2+} , As^{3+} , Al^{3+} , Fe^{3+} , Mn^{2+} , Zn^{2+} , Ni^{2+} , Co^{2+} , Ca^{2+} , Sr^{2+} , Ba^{2+} , Mg^{2+} , NH_4^+

Anions: CO_3^{2-} , S^{2-} , SO_3^{2-} , SO_4^{2-} , NO_2^- , NO_3^- , Cl^- , Br^- , I^- , PO_4^{3-} , $\text{C}_2\text{O}_4^{2-}$, CH_3COO^-

PROJECT WORK

Wherever feasible may include:

- 1) Model Preparation
- 2) Investigatory Project
 - Determine the oxalate content of Guava fruit at different stages of ripening.
 - To determine the amount of casein present in different samples of milk from different sources.
 - Preparation of soybean milk and its comparison with the natural milk.
 - Study of the effect of Potassium Bisulphate as food preservative under various conditions (temperature, Concentration, time, etc.)
 - Comparative study of the rate of fermentation of following materials: wheat flour, gram flour, potato juice, Carrot juice, etc.
 - Study of insecticides and pesticides in various fruits and vegetables.
 - To determine the presence of adulterants in common foods such as oil, butter, sugar, turmeric powder, chilli powder, rice, pepper.
 - Prevention of rusting of iron by using cathode protection method.
- 3) Science Exhibits.
- 4) Participation in Science Fairs

BOOK PRESCRIBED:

1. *Textbook of Chemistry for class XII published by NCERT, New Delhi*

BIOLOGY

Maximum Marks: 100
Practical Marks: 30

Theory Marks: 70
Time: 3 Hours

SECTION A (Botany)

Marks: 35

Unit-I Reproduction in Flowering Plants

Marks: 07

Sexual Reproduction: Flower structure; Development of male and female gametophytes; Pollination - types, agencies and examples; Out breeding devices; Pollen-Pistil interactions; Double fertilization; Post fertilization events - Development of Endosperm, embryo; Development of seed and formation of fruit; special modes - apomixis, parthenocarpy, polyembryony; Significance of seed and fruit formation.

Unit-II Genetics

Marks: 09

Heredity and variation Mendelian inheritance; deviations from Mendelism: Incomplete Dominance; Co-dominance; Multiple alleles and inheritance of blood groups; Pleiotropy; Elementary idea of polygenic inheritance; Chromosomal theory of Inheritance; Chromosomes and genes.

Molecular Basis of Inheritance: Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; Protein Biosynthesis: Transcription, genetic code, translation; Gene expression and regulation - lac Operon.

Unit-III Biology and Human Welfare

Marks: 07

Tissue Culture: Cellular totipotency, technique and application of tissue culture.

Microbes in Human welfare: Microbes in food processing, industrial production, sewage treatment, energy generation (Biogas) and microbes as bio-control agents, Biopesticides and Bio-fertilizers. Antibiotics; production and judicious use.

Application of Biotechnology in Agriculture: Genetically Modified organisms - BT crops; Biopiracy and patents.

Unit-X Ecology and Environment

Marks: 12

Populations: Population attributes and Population growth; Population interactions -

mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate, age distribution.

Ecosystems: Patterns, components; productivity and decomposition; energy flow; Ecological pyramids: Pyramids of number, biomass and energy.

Biodiversity and its Conservation: Biodiversity-Concept, patterns, importance; loss of biodiversity; biodiversity conservation; hotspots, endangered organisms, extinction, Red Data Book; Biosphere reserves, National parks, Wildlife Sanctuaries and Ramsar sites.

SECTION B (Zoology)

Marks: 35

Unit I: Reproduction in Animals

Marks: 11

Human Reproduction: Male and Female reproductive systems; Microscopic anatomy of testis and ovary; Gametogenesis (spermatogenesis and oogenesis; menstrual cycle). Fertilisation, embryo development upto blastocyst formation, implantation; Pregnancy and placenta formation. Elementary idea of Parturition and Lactation.

Reproductive Health: Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs); Birth control – need and methods, Contraception and Medical Termination of Pregnancy (MTP); Amniocentesis; Infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness)

Unit II: Genetics and Evolution

Marks: 12

Sex determination – in humans, birds and honey bee; Linkage and Crossing over.

Sex linked inheritance: Haemophilia and colour blindness.

Mendelian disorders in humans – Thalassaemia; Chromosomal disorders in humans: Down's syndrome, Turner's syndrome and Klinefelter's syndrome

Genome and Human genome project; DNA fingerprinting.

Evolution: Origin of life; Biological evolution and evidences for biological evolution; Darwin's contribution, Modern synthetic theory of Evolution; Mechanism of evolution - Variation (Mutation and Recombination) and Natural Selection with examples, types of natural selection; Gene flow and genetic drift; Hardy - Weinberg's principle; adaptive radiation; Human evolution.

UNIT: III Biology in Human Welfare

Marks: 07

Health and Disease: Basic concepts of immunology - vaccines; Pathogens; parasites causing human diseases (Hepatitis, Malaria, Dengue, Filariasis, Ascariasis, Typhoid, Pneumonia, Common cold, Amoebiasis, Ring worm) and their control; Cancer, HIV and AIDS; **Adolescence:** drug and alcohol abuse.

UNIT: IV Biotechnology and its Applications

Marks: 05

Biotechnology: Principles and processes; Genetic Engineering (Recombinant DNA Technology).

Application of biotechnology in health: Human insulin and vaccine production stem cell technology, gene therapy. Transgenic Animals.

Bio-safety issues.

Scheme of assessment

BOTANY

Question paper contains four sections namely

1. **Section –A** contains 5 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 5 = 5$ marks
2. **Section- B** contains 5 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 5 = 10$ marks
3. **Section – C** contains 5 Short Answer type questions of 3 marks each to be answered in 100 to 150 words. $3 \times 5 = 15$ marks
4. **Section - D** contains 1 Long Answer type question of 5 marks each to be answered in 150 to 200 words. $5 \times 1 = 5$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

ZOOLOGY

Question paper contains four sections namely

1. **Section –A** contains 5 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 5 = 5$ marks
2. **Section- B** contains 5 Very Short Answer Type Questions of 2 marks each to be answered in 20 to 30 words. $2 \times 5 = 10$ marks
3. **Section – C** contains 5 Short Answer type questions of 3 marks each to be

answered in 100 to 150 words. $3 \times 5 = 15$ marks

4. **Section - D** contains 1 Long Answer type question of 5 marks each to be answered in 150 to 200 words. $5 \times 1 = 5$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

PRACTICALS
Time: 03 Hours

Maximum Marks: 30
External: 20 Marks/ Internal: 10 Marks

SECTION A: BOTANY

Max. Marks: 15

A. List of Experiments

1. Study pollen germination on a slide.
2. Collect soil samples from at least two different sites and study them for texture, moisture content, pH and water holding capacity. Correlate with the kinds of plants found in them.
3. Study the presence of suspended particulate matter in air at two widely different sites.
4. Study of plant population density by Quadrant method.
5. Study of plant population frequency by Quadrant method

B. Observation/ Spotting

1. Study of flowers adapted to pollination by the agencies of wind and insects.
2. Study pollen germination on stigma through a permanent slide.
3. Study Mendelian inheritance using seeds of different colours/ size of any plant.
4. Exercise on controlled pollination – Emasculation, tagging and bagging.
5. Study two plants found in xerophytic conditions. Comment upon their morphological adaptations.
6. Study plants found in aquatic conditions. Comment upon their morphological adaptations.

SECTION B: ZOOLOGY

Max. Marks: 15

A. List of Experiments

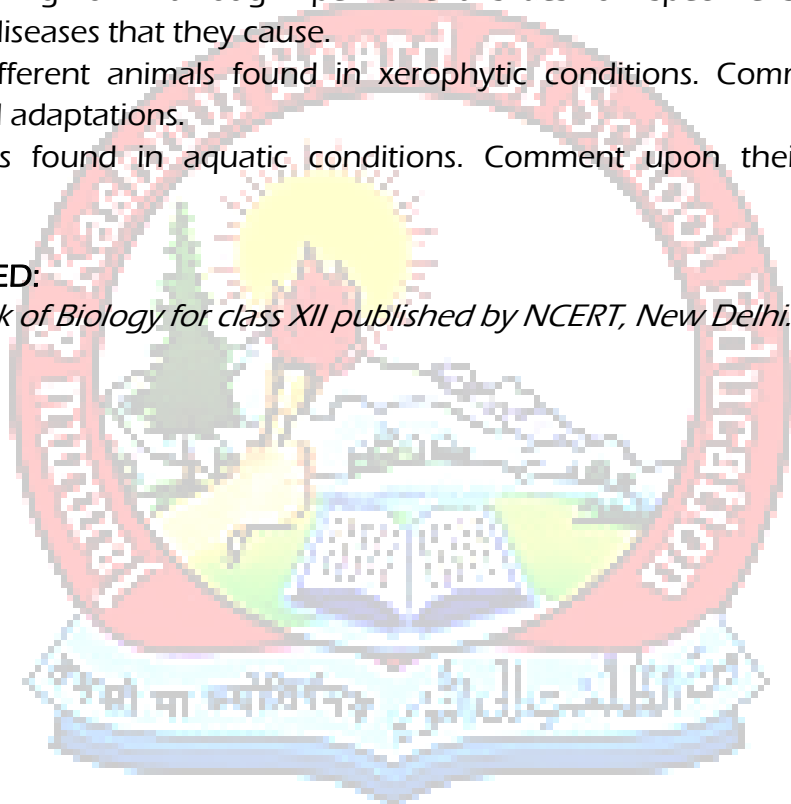
1. Collect water samples from two different water bodies around you and study them for pH, clarity and presence of any living organisms.
2. Prepare a temporary mount of onion root tip to study mitosis.
3. To study the effect of different temperatures and three different pHs on the activity of salivary amylase on starch.

B. Observation/ Spotting

1. Identification of stages of gamete development i.e. T.S. testis and T.S. ovary through permanent slides (from any mammal).
2. Study the T.S. of blastula through permanent slides.
3. Study prepared pedigree charts of genetic traits such as rolling of tongue, blood groups, widow's peak, colour blindness.
4. Identification of common disease-causing organisms like *Ascaris*, *Entamoeba*, *Plasmodium*, ringworm through permanent slides or specimens. Comment on symptoms of diseases that they cause.
5. Study two different animals found in xerophytic conditions. Comment upon their morphological adaptations.
6. Study animals found in aquatic conditions. Comment upon their morphological adaptations.

BOOK PRESCRIBED:

1. *A textbook of Biology for class XII published by NCERT, New Delhi.*



BUSINESS STUDIES

Maximum marks: 100 Marks

Theory: 80 Marks

Time: 3 hrs

Project Work: 20 Marks

Part A: Principles and Functions of Management

Unit I: Nature and Significance of Management

Marks: 07

- Management–concept, objectives, importance.
- Nature of management; Management as Science, Art, Profession.
- Levels of management–top, middle supervisory (First level).
- Management functions–planning, organising, staffing, directing and controlling.
- Coordination–nature and importance.

Unit II: Principles of Management

Marks: 06

- Principles of Management–meaning, nature and significance.
- Fayol’s principles of management.
- Taylor’s Scientific Management–Principles and Techniques.

Unit III: Business Environment

Marks: 03

- Business Environment–meaning and importance.
- Dimensions of Business Environment–Economic, Social, Technological, Political and Legal.
- Economic Environment in India.

Unit IV: Planning

Marks: 07

- Meaning, features, importance, limitations.
- Planning process.
- Types of Plans–Objectives, Strategy, Policy, Procedure, Method, Rule, Budget, Programme.

Unit V: Organising

Marks: 07

- Meaning and importance.
- Steps in the process of organising.
- Structure of organization–functional and divisional.
- Formal and informal organisation.
- Delegation: meaning elements and importance.
- Decentralization: meaning and importance.

- Difference between delegation and decentralization.

Unit VI: Staffing

Marks: 08

- Meaning, need and importance of staffing.
- Staffing as a part of Human Resources Management.
- Steps in staffing process.
- Recruitment–meaning and sources.
- Selection–meaning and process.
- Training and Development–meaning, need, methods– on the job and off the job methods of training.

Unit VII: Directing

Marks: 08

- Meaning, importance and principles.
- Elements of Direction:
 - Supervision–meaning and importance
 - Motivation–meaning and importance, Maslow’s hierarchy of needs; Financial and non-financial incentives.
 - Leadership–meaning, importance;
 - Communication meaning and importance, formal and informal communication; barriers to effective communication.

Unit VIII: Controlling

Marks: 04

- Meaning and importance.
- Relationship between planning and controlling.
- Steps in the process of control.

Part B: Business Finance & Marketing

Unit IX: Business Finance

Marks: 10

- Business finance–meaning, role, objectives of financial management.
- Financial Decisions; factors affecting
- Financial planning–meaning and importance.
- Capital Structure–meaning and factors.
- Fixed and Working Capital–meaning and factors affecting their requirements.

Unit X: Marketing Management

Marks: 14

- Marketing–meaning, functions, role.
- Distinction between marketing and selling.
- Marketing mix–concept and elements:

- Product–nature, classification, branding, labeling and packaging
- Price: factors influencing pricing
- Physical distribution: meaning, role; Channels of distribution–meaning, types, factors, determining choice of channels.
- Promotion–meaning and role, promotion mix, Role of Advertising and personal selling; objections to Advertising.
- Personal Selling-Concept, Importance,
- Sales Promotion-Merits, limitation, methods.
- Publicity-Concept &Role.

Unit XI: Consumer Protection

Marks: 06

- Importance of consumer protection.
- Consumer rights.
- Consumer responsibilities.
- Ways and means of consumer protection–Consumer awareness and legal redressal with special reference to Consumer protection Act.
- Role of consumer organizations and NGOs.

Scheme of assessment

Question paper contains five sections namely

1. **Section –A** contains 8 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 8 = 8$ marks
2. **Section- B** contains 4 Short Answer Type Questions of 3 marks each to be answered in 20 to 30 words. $3 \times 4 = 12$ marks
3. **Section – C** contains 5 Short Answer type questions of 4 marks each to be answered in 100 to 150 words. $4 \times 5 = 20$ marks
4. **Section - D** contains 4 Long Answer type questions of 6 marks each to be answered in 150 to 200 words. $6 \times 4 = 24$ marks
5. **Section – E** contains 2 Long Answer type questions of 8 marks each to be answered in 150 to 200 words. $8 \times 2 = 16$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

PROJECT WORK IN BUSINESS STUDIES

Introduction

The course in Business Studies is introduced at Senior School level to provide students with a sound understanding of the principles and practices bearing in business (trade and industry) as well as their relationship with the society. Business is a dynamic process that brings together technology, natural resources and human initiative in a constantly changing global environment. With the purpose to help them understand the framework within which a business operates, and its interaction with the social, economic, technological and legal environment, the CBSE has introduced Project Work in the Business Studies Syllabus for Classes XII. The projects have been designed to allow students to appreciate that business is an integral component of society and help them develop an understanding of the social and ethical issues concerning them.

The project work also aims to empower the teacher to relate all the concepts with what is happening around the world and the student's surroundings, making them appear more clear and contextual. This will enable the student to enjoy studies and use his free time effectively in observing what's happening around.

By means of Project Work the students are exposed to life beyond textbooks giving them opportunities to refer materials, gather information, analyze it further to obtain relevant information and decide what matter to keep.

Objectives

After doing the Project Work in Business Studies, the students will be able to do the following:

- Develop a practical approach by using modern technologies in the field of business and management;
- get an opportunity for exposure to the operational environment in the field of business management and related services;
- inculcate important skills of teamwork, problem solving, time management, information collection, processing, analysing and synthesizing relevant information to derive meaningful conclusions
- get involved in the process of research work; demonstrate his or her capabilities while working independently and
- Make studies an enjoyable experience to cherish.

GUIDELINES FOR TEACHERS

Students are supposed to select one unit out of four and are required to make only **ONE project** from the selected unit. (Consist of one project of 20marks)

1. Help students to select any ONE Topic for the entire year.
2. The topic should be assigned after discussion with the student in the class and

should then be discussed at every stage of the submission of the project. The teacher should play the role of a facilitator and should closely supervise the process of project completion. The teachers must ensure that the project work assigned to the students whether individually or in group are discussed at different stages right from assignment to drafts review and finalization. Students should be facilitated in terms of providing relevant materials or suggesting websites, or obtaining required permissions from business houses, malls etc for their project. The periods assigned to the Project Work should be suitably spaced throughout the academic session. The teachers MUST ensure that the student actually go through the rigors and enjoy the process of doing the project rather than depending on any readymade material available outside.

3. The students must make a presentation of the project before the class.
4. The teachers must ensure that the student's self-esteem and creativity is enhanced and both the teacher and the student enjoy this process.
5. The teachers should feel pride in the fact that they have explored the different dimensions of the project in an innovative way and their students have put in genuine work

1. Project One: Elements of Business Environment

The teachers should help the students in selecting any one element of the following:

1. Changes witnessed over the last few years on mode of packaging and its economic impact. The teacher may guide the students to identify the following changes:

- a) The changes in transportation of fruits and vegetables such as cardboard crates being used in place of wooden crates, etc. Reasons for above changes.
- b) Milk being supplied in glass bottles, later in plastic bags and now in tetra-pack and through vending machines.
- c) Plastic furniture doors and stools gaining preference over wooden furniture.
- d) The origin of cardboard and the various stages of changes and growth.
- e) Brown paper bags packing to recycled paper bags to plastic bags and cloth bags.
- f) Reuse of packaging [bottles, jars and tins] to attract customers for their products.
- g) The concept of pyramid packaging for milk.
- h) Cost being borne by the consumer/manufacturer.
- i) Packaging used as means of advertisements.

2. The reasons behind changes in the following:

Coca-Cola and Fanta in the seventies to Thumbs up and Campa Cola in the eighties to Pepsi and Coke in nineties.

The teacher may guide the students to the times when India sold Coca Cola and Fanta which were being manufactured in India by the foreign companies.

The students may be asked to enquire about

- a) Reasons of stopping the manufacturing of the above-mentioned drinks in India

THEN.

- b) The introduction of Thumps up and Campa cola range.
- c) Re-entry of Coke and introduction of Pepsi in the Indian market.
- d) Factors responsible for the change.
- e) Other linkages with the above.
- f) Leading brands and the company having the highest market share.
- g) Different local brands venturing in the Indian market.
- h) The rating of the above brands in the market.
- i) The survival and reasons of failure in competition with the international brands.
- j) Other observations made by the students

The teacher may develop the following on the above lines

2. Changing role of the women in the past 25 years relating to joint families, nuclear families, women as a bread earner of the family, changes in the requirement trend of mixers, washing machines, microwave and standard of living.
3. The changes in the pattern of import and export of different Products.
4. The trend in the changing interest rates and their effect on savings.
5. A study on child labour laws, its implementation and consequences.
6. The state of 'anti plastic campaign, 'the law, its effects and implementation.
7. The laws of mining/setting up of industries, rules and regulations, licenses required for running that business.
8. Social factors affecting acceptance and rejection of an identified product. (Dishwasher, Atta maker, etc.)
9. What has the effect of change in environment on the types of goods and services? The students can take examples like:
 - a) Washing machines, micro waves, mixers and grinder.
 - b) Need for crèche, daycare centre for young and old.
 - c) Ready to eat food, eating food outside, and Tiffin centres.
10. Change in the man-machine ratio with technological advances resulting in change of Cost Structure.
11. Effect of changes in technological environment on the behaviour of employee.

II. Project Two: Principles of Management

The students are required to visit any one of the following:

1. A departmental store.
2. An Industrial unit.
3. A fast-food outlet.
4. Any other organisation approved by the teacher.

They are required to observe the application of the general Principles of management advocated by Fayol.

Fayol's principles

1. Division of work.
2. Unity of command.
3. Unity of direction.
4. Scalar chain
5. Espirit de corps
6. Fair remuneration to all.
7. Order.
8. Equity.
9. Discipline
10. Subordination of individual interest to general interest.
11. Initiative.
12. Centralisation and decentralisation.
13. Stability of tenure.
14. Authority and Responsibility OR

They may enquire into the application of scientific management techniques by F.W. Taylor in the unit visited.

Scientific techniques of management.

1. Functional foremanship.
2. Standardisation and simplification of work.
3. Method study.
4. Motion Study.
5. Time Study.
6. Fatigue Study
7. Differential piece rate plan.

Tips to teacher

- (i) The teacher may organize this visit.
- (ii) The teacher should facilitate the students to identify any unit of their choice and guide them to identify the principles that are being followed.
- (iii) Similarly, they should guide the students to identify the techniques of scientific management implemented in the organisation.
- (iv) It may be done as a group activity.
- (v) The observations could be on the basis of
 - The different stages of division of work resulting to specialization.
 - Following instructions and accountability of subordinates to higher authorities.
 - Visibility of order and equity in the unit.
 - Balance of authority and responsibility.
 - Communication levels and pattern in the organisation.
 - Methods and techniques followed by the organisation for unity of direction and

Coordination amongst all.

- Methods of wage payments followed. The arrangements of fatigue study.
- Derivation of time study.
- Derivation and advantages of method study.
- Organizational chart of functional foremanship.
- Any other identified in the organisation

vi. It is advised that students should be motivated to pick up different areas of visit. As presentations of different areas in the class would help in better understanding to the other students.

vii. The students may be encouraged to develop worksheets. Teachers should help students to prepare observation tools to be used for undertaking the project.

Examples; worksheets, questionnaire, interviews and organizational chart etc.

III. Project Three: Stock Exchange

The purpose of this project is to teach school students the values of investing and utilizing the stock market. This project also teaches important lessons about the economy, mathematics and financial responsibility.

The basis of this project is to learn about the stock market while investing a specified amount of fake money in certain stocks. Students then study the results and buy and sell as they see fit.

This project will also guide the students and provide them with the supplies necessary to successfully monitor stock market trends and will teach students how to calculate profit and loss on stock.

The project work will enable the students to:

- Understand the topics like sources of business finance and capital market
- Understand the concepts used in stock exchange
- Inculcate the habit of watching business channels, reading business journals/ newspapers and seeking information from their elders.

The students are expected to:

- a) Develop a brief report on History of Stock Exchanges in India. (your country)
- b) Prepare a list of atleast 25 companies listed on a Stock Exchange.
- c) To make an imaginary portfolio totaling a sum of Rs.50, 000 equally in any of the 5 companies of their choice listed above over a period of twenty working days

The students may be required to report the prices of the stocks on daily basis and present it diagrammatically on the graph paper.

- They will understand the weekly holidays and the holidays under the Negotiable Instruments Act.
They will also come across with terms like closing prices, opening prices, etc.
- During this period of recording students are supposed to distinctively record the daily and starting and closing prices of the week other days under the negotiable instrument act so that they acquire knowledge about closing and opening prices.
- The students may conclude by identifying the causes in the fluctuations of prices. Normally it would be related to the front-page news of a business journal, for example,
 - Change of seasons.
 - Festivals.
 - Spread of epidemic.
 - Strikes and accidents
 - Natural and human disasters.
 - Political environment.
 - Lack of faith in the government policies.
 - Impact of changes in government policies for specific industry.
 - International events.
 - Contract and treaties at the international scene.
 - Relations with the neighbouring countries.
 - Crisis in developed countries, etc.

The students are expected to find the value of their investments and accordingly rearrange their portfolio. The project work should cover the following aspects;

1. Graphical presentation of the share prices of different companies on different dates.
2. Change in market value of shares due to change of seasons, festivals, natural and human disasters.
3. Change in market value of shares due to change in political environment / policies of various countries/ crisis in developed countries or any other reasons
4. Identify the top ten companies out of the 25 selected on the basis of their market value of shares.

It does not matter if they have made profits or losses.

IV. Project Four: Marketing

Adhesives	Hair Dye	Salt
Air conditioners	Hair Oil	Sarees
Baby diapers	Infant dress	Sauces/Ketchup
Bathing Soap	Inverter	Shampoo
Bathroom cleaner	Jams	Shaving cream
Bike	Jeans	Shoe polish
Blanket	Jewellery	Shoes
Body Spray	Kurti	Squashes

Bread	Ladies bag	Suitcase/airbag
Breakfast cereal	Ladies footwear	Sunglasses
Butter	Learning Toys	Tea
Camera	Lipstick	Tiffin Wallah
Car	Microwave oven	Toothpaste
Cheese spreads	Mixers	Wallet
Chocolate	Mobile	Washing detergent
Coffee	Moisturizer	Washing machine
Cosmetology product	Music player	Washing powder
Crayons	Nail polish	Water bottle
Crockery	Newspaper	Water storage tank
Cutlery	Noodles	Wipes
Cycle	Pen	
DTH	Pen drive	
Eraser	Pencil	
e-wash	Pickles	
Fairness cream	Razor	
Fans	Ready Soups	
Fruit candy	Refrigerator	
Furniture	RO system	

Any more as suggested by the teacher.

The teacher must ensure that the identified product should not be items whose consumption/use is discouraged by the society and government like alcohol products/pan masala and tobacco products, etc.

Identify one product/service from the above which the students may like to manufacture/provide [pre-assumption].

Now the students are required to make a project on the identified product/service keeping in mind the following:

1. Why have they selected this product/service?
2. Find out '5' competitive brands that exist in the market.
3. What permission and licenses would be required to make the product?
4. What are your competitors Unique Selling Proposition? [U.S.P.]?
5. Does your product have any range give details?
6. What is the name of your product?
7. Enlist its features.
8. Draw the 'Label' of your product.
9. Draw a logo for your product.
10. Draft a tagline.
11. What is the selling price of your competitor's product?
 - (i) Selling price to consumer
 - (ii) Selling price to retailer

(iii) Selling price to wholesaler

12. What is the profit margin in percentage to the
 - Manufacturer.
 - Wholesaler.
 - Retailer
 13. How will your product be packaged?
 14. Which channel of distribution are you going to use? Give reasons for selection?
 15. Decisions related to warehousing, state reasons.
 16. What is going to be your selling price?
 - (i) To consumer
 - (ii) To retailer
 - (iii) To wholesaler
 17. List 5 ways of promoting your product.
 18. Any schemes for
 - (i) The wholesaler
 - (ii) The retailer
 - (iii) The consumer
 19. What is going to be your 'U.S.P'?
 20. What means of transport you will use and why?
 21. Draft a social message for your label.
 22. What cost effective techniques will you follow for your product.
 23. What cost effective techniques will you follow for your promotion plan.
- At this stage the students will realise the importance of the concept of marketing mix and the necessary decision regarding the four P's of marketing.
- Product
 - Place
 - Price
 - Promotion

On the basis of the work done by the students the project report should include the following:

1. Type of product/ service identified and the (consumer /industries) process involve there in.
2. Brand name and the product.
3. Range of the product.
4. Identification mark or logo.
5. Tagline.
6. Labeling and packaging.
7. Price of the product and basis of price fixation.
8. Selected channels of distribution and reasons thereof.
9. Decisions related to transportation and warehousing. State reasons.

10. Promotional techniques used and starting reasons for deciding the particular technique.
11. Grading and standardization.

Presentation and Submission of Project Report

At the end of the stipulated term, each student will prepare and submit his/her project report.

Following essentials are required to be fulfilled for its preparation and submission.

1. The total length of the project will be of 25 to 30 pages.
2. The project should be hand written.
3. The project should be presented in a neat folder.
4. The project report should be developed in the following sequence-
 - Cover page should include the title of the Project, student information, school and year.
 - List of contents.
 - Acknowledgements and preface (acknowledging the institution, the places visited and the persons who have helped).
 - Introduction.
 - Topic with suitable heading.
 - Planning and activities done during the project, if any.
 - Observations and findings of the visit.
 - Conclusions (summarized suggestions or findings, future scope of study).
 - Photographs (if any).
 - Appendix
 - Teacher's observation.
 - Signatures of the teachers.
 - At the completion of the evaluation of the project, it should be punched in the centres so that the report may not be reused but is available for reference only.
 - The project will be returned after evaluation. The school may keep the best projects

ASSESSMENT

Allocation of Marks= 20 Marks

The marks will be allocated under the following heads:

1	Initiative, cooperativeness and participation	2 Marks
2	Creativity in presentation	2 Marks
3	Content, observation and research work	4 Marks
4	Analysis of situations	4 Marks
5	Viva	8 Marks
	Total	20 Marks

BOOKS PRESCRIBED:

1. *Business Studies I* by NCERT, New Delhi.
2. *Business Studies II* by NCERT, New Delhi



ACCOUNTANCY

Maximum marks: 100 Marks

Theory: 80 Marks

Time: 3 hrs

Project Work: 20 Marks

Part A: Accounting for partnership firms and companies **60 Marks**

Unit-1: Accounting for partnership firms **35 Marks**

A. Fundamentals and Admission of a partner **Marks 15**

1. Partnership features, partnership deed.
2. Provision of the Indian partnership Act 1932 in the absence of partnership deed.
3. Fixed vs. Fluctuating capital accounts, preparation of profit and loss appropriation account, division of profit among partners.
4. Past adjustments (relating to interest on capitals interest as drawings, salary and profit-sharing ratio)
5. Goodwill: Nature, factors affecting and methods of valuation, Average profit, super profit, weighted average profit and capitalization of average and super profit.
6. Calculation of sacrificing ratio and new profit-sharing ratio. Treatment for revaluation of assets and reassessment profits, adjustments of capital accounts and preparation of balance sheet.

B. Retirement and death of a partner **Marks 10**

1. Calculation of Gaining ratio and new profit-sharing ratio, treatment of goodwill as per AS-26, treatment for re-evaluation of assets and re-assessment of liabilities, adjustment of accumulated profits and balance sheet, preparation of loan account of the retiring partner
2. Calculation of deceased partner's share of profit till the date of death, preparation of deceased partners capital account-executors account.

C. Dissolution of Partnership firm

Marks 10

1. Types of dissolution of a firm, settlement of accounts, preparation of realization account and other related accounts: Capital Accounts of partners, cash/bank account.

Unit-2 Accounting for Companies

25 Marks

A. Accounting for share capital

15 Marks

1. Share and share capital nature and types.
2. Disclosure of share capital in company's balance sheet.
3. Accounting for share capital Issue and allotment of equity and preference shares. Public subscription of shares, oversubscription and under subscription of shares, Issue of shares at par, at premium and at discount, calls in advance and arrears, issue of shares in consideration Other than cash. Meaning of private placement of shares, employees stock option, sweat equity shares and right issue.
4. Accounting treatment for forfeiture and reissue of shares.

B. Accounting for Debentures

10 Marks

1. Issue of debentures at par, at premium and at a discount, issue of debenture for consideration other than cash writing off discount and loss on issue of debentures, issue of debentures with terms of redemption.
2. Issue of debentures as collateral security journal entries for interest an debenture.
3. Sources of redemption of debentures-out of profit, out of capital and creation debenture redemption reserve.
4. Methods of redemption Lump sum method, draw of lots, purchase in open market and conversion into equity shares and new debentures.

Part B:

Unit-3 Financial Statement Analysis

12 Marks

1. Financial Statement of company-preparation of simple Balance sheet of a company in prescribed form as per schedule III to the Companies Act 2013, with major headings only.
2. Financials statement analysis-meaning, significance, limitations.
3. Accounting ratios-meaning and objectives.

Types of ratios-

Liquidity ratios-Current ratio, liquid ratio.

Solvency ratios-Debt to equity, proprietary ratio.

Total asset to debt ratio,

Activity ratios-Inventory turnover ratio, debtors turnover ratio, working capital turnover.

Profitably ratio-Gross profit ratio, net profit ratio, operating ratio, operating net profit ratio, return on investment.

Unit 4: Cash Flow statement

Marks 8

1. Meaning, objective and preparations of cash flow statement (as per AS3 (revised) (Indirect method only)
2. Adjustment relating to depreciation, profit or loss on sale of assets, dividend and tax.

Note:

1. Written test of 9 marks should be from Part-B only (analysis of financial statement)
2. Project work should include one comprehensive problem and one specific problem.
3. Comprehensive problem should include full accounting process i.e., journal, posting trial balance, final accounts and its analysis (expressed in ratios)
4. Representation of data in the form of bar graphics, pie-diagram, tables and tally marks.

Or

Part B: Computerized accounting

20 Marks

Unit-3: Overview of computerized accounting system

10 Marks

1. Concept of computer accounting system.
2. Features and types of computer accounting systems (Generic, specific, tailor-made).
3. Structure of a computerized accounting system.
4. Accounting software packages tally, busy (latest version)

Unit 4: Accounting Applications of Electronics Spread

10 Marks

1. Concept and features of electronic spreadsheet.
2. Applications of electronic in generating accounting information, preparing depreciation schedule, loan repayment schedule, payroll accounting and other such applications.

Scheme of assessment

Question paper contains five sections namely

1. **Section –A** contains 8 (Objective Type Question/Multiple Choice Questions) of 1 mark each. $1 \times 8 = 8$ marks
2. **Section- B** contains 4 Short Answer Type Questions of 3 marks each to be answered in 20 to 30 words. $3 \times 4 = 12$ marks
3. **Section – C** contains 5 Short Answer type questions of 4 marks each to be answered in 100 to 150 words. $4 \times 5 = 20$ marks
4. **Section - D** contains 4 Long Answer type questions of 6 marks each to be answered in 150 to 200 words. $6 \times 4 = 24$ marks
5. **Section – E** contains 2 Long Answer type questions of 8 marks each to be answered in 150 to 200 words. $8 \times 2 = 16$ marks

Note: The paper setter shall incorporate Higher Order Thinking Skills (HOTS) questions apart from knowledge, memory and application based questions.

Part C: Project Work

20 Marks

- Internal Assessment: - 05 Marks
- External Assessment: - 15 Marks

Project File	03 Marks
Written Test	09 Marks
Viva-Voce	03 Marks

BOOKS PRESCRIBED:

- 1. Accountancy Part I Textbook for Class 12th by NCERT, New Delhi.*
- 2. Accountancy Part II Textbook for Class 12th by NCERT, New Delhi.*



LIST OF DELETED TOPICS OF SOCIOLOGY
BOOK 1: INDIAN SOCIETY

Chapter	Page No.	Dropped Topics
Chapter-1 Introducing Indian Society	2	Third Paragraph
	3	1st and last paragraph
	4	Full page content and visuals
	5	First, third, fourth and fifth paragraph
	6-7	All visuals
Chapter-2 The Demographic Structure of the Indian Society	14	Last four lines in the 3 rd paragraph "Infact..... cities"
	14-15	Last paragraph, last 3 lines "On the other... previous page"
	15	Ninth to the last line of the second paragraph "The total fertility visaria 2003" In first paragraph last line "misused" word is added in phase of 'used'.
	31	Last seven lines in the second paragraph "for example regions" The last paragraph, first two lines "It is also prosperous families"
	32	Last four lines in the first paragraph "Enormous effort... in this chapter"
	34	Full Page/ Visual
	38	Visual deleted
	39	Reference 'Visaria, Pravin and Visaria.....'
Chapter-3 Social Institutions: Continuity and Charge	45	Second paragraph "Not surprisingly ... social institutions"
	46	First 12 lines in the second paragraph "other interventions ... end of the colonial period"
	47	Last eight lines in second paragraph "In other words educational terms"
	48	Last four lines in second paragraph "For example food sharing"
	48-49	Last paragraph, last nine lines and first four lines. "Although this 'lower' caste"
	50	The terms 'so called' in the first line of the second paragraph Third paragraph "The juxtaposition... in the present" In section 3.2, last four lines of first paragraph "and most ... convenience"
	53-54	Section "Mainstream attitudes towards tribes"
	55	Line six till the last line of the second paragraph "thus citizen ... are powerless"
	56	Last paragraph of page 56 continued in page 57 is deleted "The family in society"
	57	Box 3.2
	58	Last three lines above the visual
	59	Box 3.3
	Chapter-4 The Market as a Social	62-63

Institution	65	Second paragraph "According to social equality"
	66	Exercise for Box 4.1
	67	Second paragraph "The Nattu Kottai.... Rudner 1994" First two lines of Box 4.2 "This is not systems"
	68	Exercise for Box 4.2
	72	Full page Visual
	73	Third paragraph, last five lines "Consumption ... modern life"
	75	Box 4.3 and Exercise for Box 4.3
Chapter 5 Patterns of Social Inequality and Exclusion	84	Some lines from fourth paragraph "A Dalit is likely... professional work"
	86-87	Third and fourth paragraph "It is important ... wishes of the excluded"
	91	Last paragraph, ninth to fifteenth line "At the same ... abuse and humiliation"
	92	Full page visual
	93	Box 5.2
	95-96	Box 5.3
	99	Two lines from third paragraph "Should have made ... Firstly"
	100-101	Box 5.5
	103	Full page visual
	106	Sixth line after point 4 "The rape murders" Third paragraph "Social change ... they emerge"
Chapter 6 The Challenges of Cultural Diversity	114	Last two paragraphs "If you future"
	115	First paragraph under section 6.1 "Before discussing ... the nation state?"
	116	Activity 6.1 Last paragraph "It is a social ... it was wrong"
	117	Box 6.1
	118	Activity 6.2
	119	Activity 6.3
	124	Chart 1
	125	Visual Last paragraph "For example ... next page"
	128	Second paragraph "On the whole current trends"
	130	Last eight lines in Second paragraph "In democratic ... identity"
	133	Activity 6.5
	134	Sixth to thirteenth line in second paragraph Second line towards the end of the paragraph in 3 rd paragraph
	135	Second paragraph first six lines under section 'Secularism' "As we have in fact"
	136-137	Second paragraph "One kind of ... hard to settle" Fourth & fifth paragraph "These kinds ...should count."
	137-138	Content starting from "Thus ... dalit movements."

BOOK 2: Social Change and Development in India

Chapter	Page No.	Dropped Topics
Chapter 1: Structural Change	3	Activity 1.1
	5	Box 1.1
	10	Box 1.7; Exercise for Box 1.6 and 1.7
	11	Last Paragraph ("A modern... as well?")
	12	Box 1.9
	13	Exercise for Box 1.10
	19	Visual
Chapter 2: Cultural Change	21	Last Four Lines of Second Paragraph ("Yet another... such a religion")
	23	Second Paragraph ("We begin... secularisation")
	24–25	Last Five Lines ("Therefore, to be... vision")
	25	Last Four Lines from Fifth Paragraph "However... discriminated"
	26	Boxes 2.2 and 2.3
	29	Activities 2.6, and Above Paragraph ("We... to this")
	30–31	Second Last Paragraph Starting From "A Rational ... Arunachal Pradesh."
	31	<ul style="list-style-type: none"> • Box 2.7 • Content Deleted from Fifth Line ("Such as rates of church-attendance")
	32	Box "Connecting to God"
	33	Exercise for Box 2.8 and Last four Lines of Conclusion "The next... getting redefined"
Chapter 3: The Story of Indian Democracy (Renamed as 'The Constitution and Social Change')	36–43	Full Pages
	49	Last Paragraph Under 'Democratisation and Identity' ("The reports... money matters")
	50	Boxes 3.11, 3.12 and 3.13, Exercise for Boxes 3.11, 3.12 and 3.13
	51	<ul style="list-style-type: none"> • Content in the First Paragraph Under Section 3.3 ("You will recall... different groups") • Content in the Second Paragraph under Section 3.3 ("The question... individuals.") Last Point in Activity 3.1
	52	Exercise for Boxes 3.14 and 3.16
	53	Box 3.16 and the Sentence Above
59	Last Paragraph, Few Lines ("Similarly... meant that ... bonded labour Karnataka... in a village... dominant caste")	

Chapter 4: Change and Development in Rural Society	63	<ul style="list-style-type: none"> • Activity 4.3 is Partially Deleted (Second and third points) • Last Three Lines of Second Paragraph ("However... structure") • Last Seven Lines of Fourth Paragraph ("While..... not in name") • Sixth, Seventh and Eighth Lines from Last Paragraph • Slight Modification in the Content ("As a result... undeveloped")
	65	Two Visuals on the Left of "Cultivation in different parts of the country"
	69-70	Last Paragraph ("While farmers... an event")
	70	Content from ("The loss... their favour")
Chapter 6: Globalisation and Social Change	74	First Five Lines ("Which. be made")
	75	Third Paragraph ("While the early... by the West")
	77	Second Paragraph- Industrialisation in the Early Years of Indian Independence
	78	<ul style="list-style-type: none"> • Box 5.1 First Line of Third Paragraph
	79	First Three Paragraphs under Section 5.3 ("If you open... work culture")
	80	Boxes 5.2 and 5.3
	81	Box 5.4
	82-83	Last Paragraph Continued on Page 83 is Deleted. ("Another... survive")
	85	Box 5.6
	86	<ul style="list-style-type: none"> • Visual-Different Brands of Bidi Activity Box 5.3
	87	<ul style="list-style-type: none"> • Distribution Value of Bidi along with Content on the Left • Box 5.7 Content under Section 5.7 ("Many workers... with them")
	88	Content in First Paragraph ("According... demands")
	88-89	Box 5.8, Exercise for Box 5.8.
	90	Second Last Reference, (Roy, Tirthankar. 2001...)
Chapter 6: Globalisation and Social Change	93	Third and Fourth Paragraph and First Four Lines of the Fifth Paragraph
	94	First Six Lines of Second Paragraph ("Sociology... ever before")
	97	Last Six Lines of Third Paragraph under 'The Economic Policy of Liberalisation' ("You have... constitution")
	98	Visual

	99	Visuals
	100	Box 6.2, Exercise for Box 6.2
	102	<ul style="list-style-type: none"> • Three Visuals Activity 6.4 Last Point
	103	<ul style="list-style-type: none"> • Line before (“The following... Shift”) Box 6.5 and 6.6, Exercise for Box 6.2
	104	Box 6.7 and Exercise for Boxes 6.5, 6.6 and 6.7
	110	Activity 6.8
Chapter 7: Mass Media and Communications	119	Box 7.3 and Exercise for Box 7.3
	123	Exercise for Box 7.8
	124	Visual
	125	Full Page Visual
	128	Box 7.12
Chapter 8: Social Movements	137	First Three Lines of the Paragraph under Section 8.1, (“People...movement.”)
	139	Box 8.3 and Exercise for Box 8.3
	140–141	<ul style="list-style-type: none"> • Theories of Social Movements Activity 8.4, Box 8.4 and Exercises for Box 8.4
	142	Activity 8.5
	142–144	<ul style="list-style-type: none"> • Entire Section under ‘Another way of classifying: Old and New: Visual Retained
	144	First Few Lines of Section ‘Distinguishing the new social...’ (“We have... and”)
	145	Second Paragraph Starting with “Can we... line”
	147	Exercise for Boxes 8.5 and 8.6
	148	Activity 8.7 and Last two Paragraphs
	149	<ul style="list-style-type: none"> • Exercises for Boxes 8.7 and 8.8 Two Lines Below the Exercises for Boxes 8.7 and 8.8
	150	Second Last Paragraph (“The formation... 250,000”)
	151	Last Paragraph and Last Three Lines from Second Last Paragraph (“During the...understand these”)
	152	Poem on The Dalit Movement (“The sun of... Rise, O people”)
	153	Activity 8.9 and Box 8.9 and Exercise for Box 8.10 and Few Lines (“Dalit literature... castes”)
	154–155	<ul style="list-style-type: none"> • Entire Section under “The Upper Caste Response” continuing to next page. (“The increasing...Book 1”) Box 8.12
158	Last Five Lines of Second Paragraph	
159	Boxes 8.13 and 8.14 and Exercise for Box 8.14	

NOTE:

1. The syllabi and marks distribution is strictly in accordance with the rationalized syllabi provided by the NCERT.
2. The internal assessment/ internal Project Work will be evaluated by the concerned subject teacher.
3. All the stakeholders can give their valuable feedback and suggestions regarding the notified rationalized syllabi to CDR Wing, JKBOS



